C4ISR & Network Conference

LandWarNet 2025 and Beyond





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The Network Today



☑ Enterprise Identity Established – DoD Enterprise Email (Completed Jul 13)

☑ Released Army, DISA, Air Force Unified Capabilities RFI (Released Feb 14)

Modernizing, Virtualizing and Moving Applications to DISA CDCs

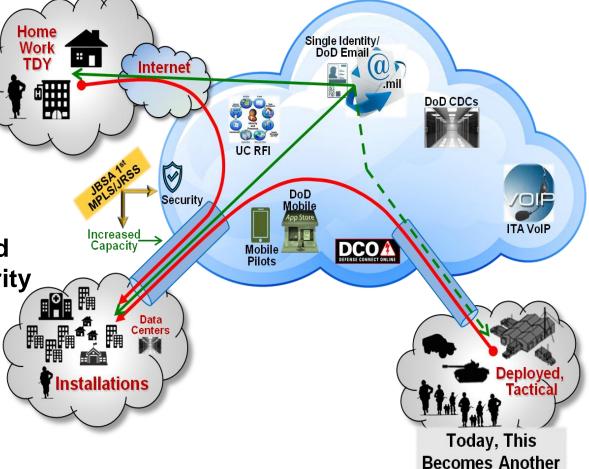
Identifying & Killing Legacy/Redundant Applications

▲ Increasing Bandwidth and Improving Network Security

(IOC at JBSA Sept 14)

✓ DoD Mobile App Store Stood-up (Mar 14)

Piloting Mobile Solutions



Installation



The Network Tomorrow



☑ Modernized Telephony and Delivered Unified Capabilities Solution (FY15)

☑ Data Stored in DoD Cloud (FY18)

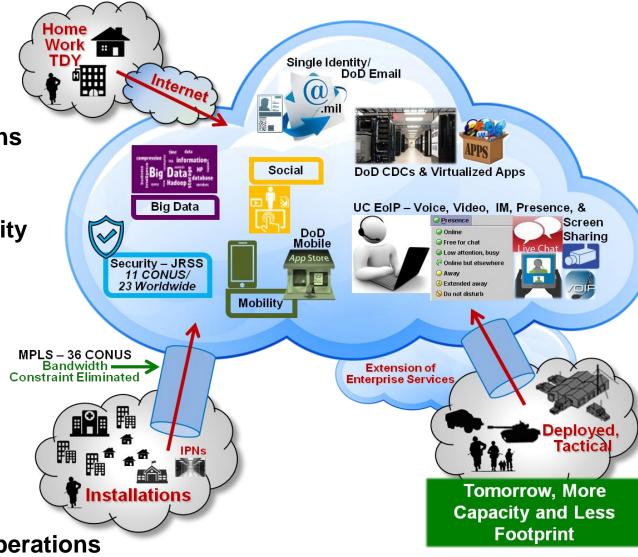
✓ Virtualized Applications in DISA CDCs (FY18)

☑ MPLS Boosted Capacity and Throughput

(15-16 Installations per year)

☑ JRSS Regional Security Complete
(FY18)

☑ Robust Mobile Environment



☑Improved Deployed Operations



Modernizing All at Once Without Having to Touch Every P/C/S



- Inside/Outside Plant Upgrade
- LMR System
- Area Distribution Node Switch
- Main Distribution Frame
- Power/HVAC
- **Voice Connectivity**
- TDM Voice Call Processor
- **End-user Building Switch**
- **Installation Data Centers**
- **Security System (TLA)**
- **Main Communications Node Switch**
- Tech Control Facility (Where Required)
- Lifecycle Refresh PBX Phone Switch to VoIP

- **Unified Capabilities Software**
- **VolP Managed Service**
- Reduced cost through commodity purchasing
- **Core Data Centers & Application Migration**
- **Joint Regional Security** Stacks (JRSS)
- **Eliminate with MPLS Router**

HVAC: Heating, Ventilation, Air Conditioning MPLS: Multi-protocol Label Switching LMR: Land Mobile Radio System

P/C/S: Post/Camp/Station

PBX: Private Branch Exchange TDM: Time-division Multiplex

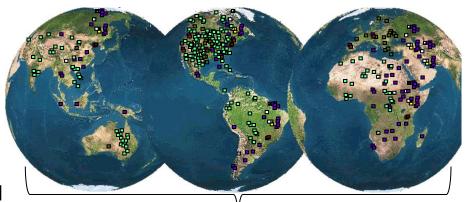
TLA: Top Level Architecture VoIP: Voice over Internet Protocol



Capacity and Security



- ★ Multi-Protocol Label Switching (MPLS)
 - Army Backbone Bandwidth Boosted to 100 GBPS; Installation Increased to 10 GBPS
 - Virtual Traffic Management Not Infrastructure Dependant
 - Highly Scalable and Protocol Agnostic Data-Carrying Switch – "Smart" Path Learning Mechanism
 - ★ Joint Regional Security Stacks (JRSS)
 - Defensive Footprint Drastically Reduced
 - A Much More Defendable Perimeter
 - Part of the Joint Security Architecture



700+ Reduced to 23

★ Outcome

- Significantly Increases Network Security While Also Reducing Costs
- Enforces Standard Security Architecture and Business Processes
- Speeds Up Traffic Flow and While Enabling C2 Management

GBPS Gigabits per second
C2 Command and Control

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NetOps and Enterprise Services



★ NetOps

- Standardizes Baseline IT Systems and Services While Improving IA and Cyber Security
- Creates Commonality of Processes, Technologies, and Capabilities
- Requisite for an Enterprise Focused Organization
- ESMSaaS RFP Slated for Release 4th QTR FY14

★ Unified Capabilities (UC)

- Army, Air Force, DISA RFI Released Feb 2014
- DISA, Army, Air Force RFP to Follow
- Shifting Focus from Hardware-Based VoIP
 Solutions to a DoD Enterprise Software Solution

Single Identity/ DoD Email Social DoD CDCs & Virtualized Apps UC EoIP - Voice, Video, IM, Presence, & Screen Sharing Wobile On Mobility Mobility Mobility

★Outcome

- Standardized, Seamless, Integrated
- Enables Effective C2 Up, Down & Across the Network
- Same End-User Experience Regardless of Location and Device

C2	Command and Control
ESMSaaS	Enterprise Service Management
	System as a Service
IA	Information Assurance
RFI	Request For Information
RFP	Request for Proposal
VoIP	Voice over Internet Protocol



Data Centers and Application Migration



★ Aligned with DoD Policy and JIE Architecture



- "DoD Component Data Center Consolidation Implementation Plans" Memo (Jul 2013)
 - DISA DECCs Only Authorized Core Data Centers (CDCs)
 - All Enterprise Applications <u>Must</u> Migrate to CDCs
 By End Of FY18



- Army CIO/G-6 Drafting "Migration of Army Enterprise Systems/Applications to Core Data Centers"
 - Slated for USA/CMO Signature By End Of May 2014

★ Outcome

- Improved SecurityCheaper
- Less, More Operationally Effective Applications

Closed 235 Data Centers To Date

107% of this FY Goal!

On Track to Meet FY18 Goal (Close 533)

- √ \$32.5M Estimated
 Cost Savings
- ✓ 1,040 Applications
 Killed
- ✓ 1,332 Servers

 Decommissioned
- √ 49 Personnel Reductions
- √ 65,613 Sq Ft
 Relinquished



Where We Expect To Be in FY16 And How You Can Help





MPLS and JRSS



Data Centers & Application Migration



Enterprise Services and UC



NetOps

Mission Partners

- ★ Help Keep the Network a Top Modernization Priority
- ★ Utilize Enterprise Network Capabilities – No Unique Solutions!
- ★ Continue to Move Data, Apps, and Systems to the Cloud
- ★ Teamwork is Critical to Enterprise-Level Success

Industry Partners

- ★ Be Good Stewards Don't Let Us Write Stupid Requirements
- ★ Continue to Partner With Us on Our NIEs and New ELAs
- ★ Focus on Software Based Solutions and the COF
- ★ RDT&E/IRAD Help us Find the Right Balance so We are Not Duplicating Investments Efforts



Thank You ::: Questions



